Chemistry-Osterberg
Ch. 3-The Atom

Name _____
Date _____ Hour ____

Atomic Structure Worksheet

Part I-Fill in the blanks of the statements below.

1. The atomic number is the number of _____.
2. The mass number is the number of protons and _____.
3. Isotopes are atoms of the same element that have a different mass due to a different number of _____.
4. In a nuclear symbol, the _____ number is always written in the upper left corner of the symbol. The _____ number is always written in the lower left corner of the symbol. If an atom has a charge, the charge is written in the upper _____ corner.
5. In hyphen notation, the _____ is always written behind the hyphen.
6. If an atom is neutral, the number of _____ will equal the number of protons.
7. If an atom is negative, the number of electrons will be _____ than the number of protons.
8. If an atom is positive, the number of electrons will be _____ than the number of protons.

Part II-Fill in the missing information in the table below.

	Nuclear Symbol	**Hyphen Notation**	**Atomic #**	**Atomic Mass**	**Mass #**	**p^+**	**n^0**	**e^-**
1	$^{1}_{1}H$							
2	$^{1}_{1}H^{+1}$							
3		Carbon-12						6
4	$^{7}_{3}Li^{+1}$							
5			17				18	18
6						19	20	19
7		Magnesium-24						10
8	$^{65}_{33}As^{-3}$							
9		Silver-100						47
10			47		98			46
11						16	16	18
12	$^{183}_{92}U$							

Chemistry-Osterberg
Ch. 3-The Atom

Name _____
Date _____ Hour ____